

Building Administration Report

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Facing new safety initiatives, curtailed budgets, and a new emphasis on adhering to National Fire Protection Association electrical safety programs, the NSLS continued to be a vibrant beehive of activity in 2004. Scientists, technicians, support staff, and in-house service personnel worked together to establish a safe and healthy work environment for scientific research. Beamline X29 was fully commissioned and began data-taking runs, overhead projectors were installed in select conference rooms, maintenance programs in conjunction with the BNL Plant Engineering Division were undertaken, and several in-house workshops were held. These factors all contributed to another very active and productive year at the NSLS.

Safety

First and foremost on staff and users' minds these days is performing everyday duties in a manner that promotes a culture of safety and a safe working environment at the NSLS. Seasoned subject matter experts (SMEs) are available to answer questions relating to all aspects of industrial safety. Combined with a fully staffed Environment, Safety, Health, & Quality (ESH&Q) Division, these SMEs are conveniently located on the experimental floor, adjacent to the main control room. No one should feel that answers on how to proceed safely are far from hand. Stop-work orders may be invoked when observing operations that may place personnel in imminent danger. Numerous review avenues have been established that assist personnel with work being planned and carried out, such as hazard analyses, which are performed and reviewed by the appropriate SME. Everyone should take advantage of these services whenever a task is planned that may involve hazards, known or yet unknown.

During the past year, after a site-wide visit by the Occupational Safety and Health Administration (OSHA) inspection team in October 2003, the operative words for work performance within the laboratory continued to be "safety" and "compliance." Various NSLS and BNL support, safety, and technical groups corrected many findings of the various OSHA inspection teams. A small percentage of the findings were grouped with similar findings from other laboratory departments/divisions and will be tracked for future closeout by the BNL Plant Engineering Division. Tier 1 facility and beamline inspections by NSLS ESH&Q staff will continue to search for other possible safety concerns, and will record and forward these findings to the appropriate individuals or groups for remediation. Once notification is received, a data-based system will track the findings, which will either be repaired in a timely fashion or corrected immediately. After mitigation, the Tier 1 contact is notified to close out the finding.



Simultaneously, we have reacted to other Lab-wide directives as they surfaced. One area of concern revolved around material-handling equipment and hoisting and lifting equipment. The NSLS point of contact for such issues is Bob Kiss. A new training program that Bob has been instrumental in developing is tailored to fit the requirements of the type and frequency of lifts performed within the NSLS facility. As a result of this directive, all cranes have been assigned a padlock, with limited key distribution to those individuals deemed "responsible" for the operations of a particular crane or overhead-lifting device. Feel free to contact Bob if you have any questions pertaining to lifts, hoists, cranes, and all of the "below the hook" lifting devices that you may encounter. An ongoing effort to capture all such devices in our inventory will assure that the proper inspections take place within the yearly time frame. If, at your workplace, you have any below-the-hook lifting devices, such as slings, shackles, strong backs, etc., that are not inspected on a yearly basis, please have Bob inspect these items. Any lifting device, such as portable lifters/engine hoists, hoists, chain falls, slings, shackles, etc., brought to BNL and used on-site must be inspected prior to use. This includes new and used items, even if the item will only be used once. All inspected items will carry a color-coded identification tag, alerting the user that a proper inspection took place and that the item

has been recorded in our inventory system. Of course, each below-the-hook item must be checked by the end user each time it is used, to assure that no damage has occurred to the device while in storage, or by the previous user.

A new worker qualification and training list for users and beamline staff was implemented and presented to the user community. The list outlines tasks considered to be “skill of the worker.” Tasks were divided into three levels, with the rigor of training and enhanced work planning corresponding to the difficulty of the assigned tasks or systems being modified or impacted. In all cases, if the scope of the task has changed or new hazards have been introduced, stop, reassess, and get qualified assistance before returning to complete the task.

A new automated external defibrillator (AED) has been installed in the main lobby of Building 725 and another has been installed in Building 729 near the west doorway. A number of NSLS personnel have taken BNL’s training course in CPR and AED use. Additional AEDs will be purchased and installed during FY05.

Maintenance/Upgrades

In a continuing program, the BNL Plant Engineering Division once more provided both material and manpower resources to address various roof leaks detected in areas above the experimental floor. Areas that received considerable attention were sections above the VUV ring, the vehicle ramp leading to the center of the x-ray ring, and the area above beamline X29. The proof testing of the repairs will be how well they survive the frost-thaw cycles of the winter season.

The main lobby stairwell leading to the User Administration reception area received a new coat of paint. New labeling schemes in the stairwell help direct visitors to the Chairman’s office and conference rooms. New overhead digital projectors were installed in both the Seminar Room and Conference Room A.

A full inspection of the facility revealed some concerns with the interior seals and gaskets on several windows, installed during later phases of building construction. Those windows deemed to be in suspect condition were removed and replaced. The driver for this inspection was a pane of glass that separated itself from the vacuum seal on one of the double-pane insulating windows. When a vacuum seal deteriorates, moisture seeps between the panes of glass, causing the glue to weaken. Inspections will continue to look for windows with voided seals, and these units will be scheduled for replacement.



NSLS Administration Group

The annual stripping and waxing of the experimental floor was completed in mid-December. This coordinated effort requires much planning and logistical deployment of several custodial crews, working under the guidance of Plant Engineering Custodial Services supervisors and the NSLS alternate building manager to complete the tasks with as minimal an impact on beamline operations as possible. Two custodial supervisors, a lead custodian, and a crew of nearly 20 custodians refinished the beamline areas, hallways, and perimeter walkways on both the x-ray and VUV experimental floors.

In late December, the south elevator in the main lobby had to be shut down to repair leaky packing on the main lift cylinder. Concurrently, the flow valve, which allows the oil in the cylinder to return to the reservoir, was replaced. In the future, the Lab plans to fund a complete overhaul of the electrical drive components of this elevator, as the present logic system is driven by an outdated method using solenoids and relays. Installing solid state, up-to-date logic drive components will occur as funding becomes available.

Bicycles

The BNL Quality of Life Office has turned over bicycle management to department building managers. The NSLS maintains a fleet of seven bicycles that may be loaned out for both long and short terms. Once

signed out, the “owner” is responsible for maintaining the bicycle, keeping it protected from theft, and returning the bike in good condition at the end of the term. It is necessary to follow all applicable road-use rules when biking on- and off-site, and wearing a helmet is required when biking on-site.

Going Wireless

The x-ray and VUV floors now boast wireless capabilities, running at broadband speeds, with coverage extending to all areas within points of normal user access. Common areas, such as the library, conference rooms, and the main lobby are covered. This wireless connection is outside the BNL firewall, therefore, one would need to use virtual private network (VPN) software to enter the BNL intranet. Additional future planning includes installing wireless access points inside the firewall.

User Moves

A concerted effort between Plant Engineering, NSLS, Exxon, and the New York Structural Biology Center was undertaken during the summer, culminating in the relocation of machine tools and user shop equipment to Building 801. As a result, dedicated interior building space was allocated to the last user staff members being housed in portable structures in the NSLS trailer park, located east of Building 727.

Holiday Merrymaking

In our year-end event to celebrate the holiday season, the Budget group hosted a festive party. They transformed the main lobby with hanging snowflakes and created intimate bistro-style seating on the mezzanine overlooking the lobby. The decorations brightened the spirits of all in attendance. After feasting on a potluck buffet and tables of desserts, a staff “talent” show was held in the Seminar Room, hosted by Al “Donnie Osmond” Boerner, with accompaniment from Al Almasy on keyboard. There were singers, musical performers, a “hunters and reindeers” act, a tale of budget woes parodied to *The Night Before Christmas*, and an amusing show by the “Don Ho Hula Guys.” All in all, it was a day to remember.

Conclusion

The multi-faceted NSLS facility, where each year thousands of users carry out their research, is alive and well. With assistance from many talented, behind-the-scene individuals, who work so diligently to make our time here a bit more pleasant, my thanks. We continue to pace ourselves, but we are moving forward steadily. There is brightness on the horizon, as the future holds plans for larger and more powerful tools to explore the mysteries of our surroundings.